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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,670	12/17/2001	Efim S. Statnikov	5600/DIV	7827

7590 05/16/2003

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EXAMINER
WYSZOMIERSKI, GEORGE P

ART UNIT	PAPER NUMBER
1742	

DATE MAILED: 05/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

HG

Office Action Summary	Application No.	Applicant(s)	
	10/015,670	STATNIKOV, EFIM S.	
	Examiner	Art Unit	
	George P Wyszomierski	1742	

-- The MAILING DATE of this communication app ars on the cover sheet with th correspond nc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/17/01 (Divisional Application)* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *21 and 37-46* is/are pending in the application.

4a) Of the above claim(s) *21,45 and 46* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *37-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 37-44, drawn to an apparatus, classified in class 266, subclass 240.

II. Claims 21, 45 and 46, drawn to a product, classified in class 148, subclass 400+.

2. The inventions are distinct, each from the other because:

Inventions I and II are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the apparatus as claimed can be used for making a different product, such as a spring or other tensioned product.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their different classification and recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Mary Breiner, attorney of record, on May 2, 2003 a provisional election was made with oral traverse to prosecute the invention of Group I, claims 37-44. Affirmation of this election must be made by applicant in replying to this Office action. Claims 21, 45 and 46 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Claims 37-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The statement in claim 37, lines 10-11 that the claimed apparatus "converts a zone...into a molten state" does not appear to correctly describe what occurs during operation of the inventive apparatus. Nothing in the specification would lead one to believe that any portion of the material being treated becomes molten; rather, some changes in the microstructure of the material occur as a result of treating the material using the claimed apparatus, but these changes would not include any formation of a liquid or molten state. Claims 38-44 are included in this rejection as they are dependent on claim 37.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 37, 42, 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMaster (U.S. Patent 3,650,016).

McMaster discloses a device which includes a source of vibrational energy and a transducer for transmitting this energy for treatment of a product. The "motion of the tip of the horn of the transducer" as described by McMaster column 4, lines 3-4 corresponds to the "means for withdrawing...by positioning said transducer" as

presently claimed. With regard to instant claims 42 and 44, the "tool" as shown in the drawing figures of McMaster corresponds to the "wave guide" of claim 42 and the "peen" of claim 44. With regard to instant claim 43, McMaster column 6, lines 1-8 indicate that the prior art apparatus may be used to treat a variety of fastener systems, which would include those that are "difficult" to reach as presently claimed, and the prior art configuration appears to be "efficient" as set forth in the instant claim.

McMaster does not specify converting any zone of the material into a molten state, as recited in the instant claims. This difference is not seen as resulting in a patentable distinction between the prior art and the invention because the actual result of using the McMaster apparatus is equivalent to that of the present invention, i.e. the formation of a desired stress level in the product being treated. Because the actual apparatus parts an their effects appear to be substantially the same in either the prior art or the claimed invention, a prima facie case of obviousness is established between the disclosure of McMaster et al. and the presently claimed invention.

8. Claims 38, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMaster, as above, in view of Dryga et al. (U.S. Patent 5,035,142).

As stated supra, McMaster discloses an apparatus for vibratory treatment of materials to create desired stresses therein, including parts substantially as defined in the instant claims. Dryga indicates that vibratory treatment apparatuses are conventionally used to treat welded materials (see Dryga column 1, lines 13 and 21-23). The gist of the Dryga disclosure is that such apparatuses conventionally include means

for in-process measuring so that one of skill in the art can tune the vibrations to the resonant frequency of the material being treated, i.e. as defined in instant claims 40 and 41. This disclosure of Dryga (and its attendant advantages) would have motivated one of ordinary skill in the art to incorporate the presently claimed features of the invention into an apparatus as described by McMaster.

9. Claim 39 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The prior art does not disclose or suggest an apparatus as claimed which includes a welding means and means for moving the transducer along a weld seam pattern.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (703) 308-2531. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (703) 308-1146. The fax phone number for this Group is (703) 872-9310 for all correspondence except for After Final amendments in which case the Fax number is (703) 872-9311. The Right fax number for this examiner is (703) 872-9039. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

GEORGE WYSZOMIERSKI
PRIMARY EXAMINER

GPW
May 14, 2003